

AMENDMENTS TO THE ABSTRACT

Please amend the abstract as follows:

According to an embodiment of the invention, a method and apparatus are described for memory trace buffering. An embodiment of a processor includes an execution unit and a buffer. The buffer is to store certain data regarding each memory operation of a plurality of memory operations that are executed by the processor. An embodiment of a processor includes an execution unit to execute instructions and a buffer to store data regarding a plurality of instructions executed by the execution unit. The data stored for each executed instruction includes an instruction address and an effective address for the executed instruction. The storage of data in the buffer is halted upon the occurrence of an event, and the processor determines a relationship between a set of executed instructions based on the stored data for the set of executed instructions in the buffer.